

May 8, 2003

**Re: South Indiana Gas and Electric Company 163-16220-00001**

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### **Notice of Decision: Approval - Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

(over)

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
Administrator, Christine Todd Whitman  
401 M Street  
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

FNTVPMOD.wpd 8/21/02



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Frank O'Bannon  
**Governor**

Lori F. Kaplan  
**Commissioner**

100 North Senate Avenue  
P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.state.in.us/idem](http://www.state.in.us/idem)

May 8, 2003

Mr. Ron Jochum  
Southern Indiana Gas and Electric Company  
20 Northwest Fourth Street  
Evansville, Indiana 47741

Re: 163-16220-00001  
3rd Significant Permit Modification to:  
Part 70 permit No.: T163-6899-00001

Dear Mr. Jochum:

Southern Indiana Gas and Electric Company was issued a Part 70 operating permit on February 10, 1999 for a stationary electric utility peaking station. A letter requesting changes to this permit was received on October 15, 2002. Pursuant to the provisions of 326 IAC 2-7-12, a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of changes in the NO<sub>x</sub>, CO, and SO<sub>2</sub> emission limits for turbine Unit #2, and adding NO<sub>x</sub> and CO continuous emission monitoring requirements for this unit.

All other conditions of the permit shall remain unchanged and in effect. Please find attached a copy of the revised permit.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

## Attachments

ERG/YC

cc: File - Vanderburgh County  
Vanderburgh County Health Department  
City of Evansville Environmental Protection Agency  
Southwest Regional Office  
Air Compliance Section Inspector - Scott Anslinger  
Compliance Data Section - Karen Nowak  
Administrative and Development - Sara Cloe  
Technical Support and Modeling - Michele Boner





*Frank O'Bannon*  
Governor

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100 North Senate Avenue  
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Indianapolis, Indiana 46206-6015  
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**PART 70 OPERATING PERMIT  
OFFICE OF AIR QUALITY  
and CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Southern Indiana Gas and Electric Company  
Broadway Avenue Generating Station  
2600 Broadway Avenue  
Evansville, Indiana 47712**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

|  |  |
|--|--|
| Operation Permit No.: T163-6899-00001  |  |
| Original issued by<br>Janet G. McCabe, Assistant Commissioner<br>Office of Air Quality   | Issuance Date: February 10, 1999<br>Expiration Date: February 10, 2004 |
| First Significant Permit Modification No.: 163-14083-00001, issued July 19, 2001<br>First Administrative Amendment No.: 163-14977-00001, issued November 2, 2001<br>First Reopening No.: R 163-13509-00001, issued January 24, 2002<br>Second Significant Permit Modification No.: 163-15853-00001, issued January 31, 2003<br>Second Administrative Admendment No.: 163-16523-00001, issued February 11, 2003 |  |
| Third Significant Permit Modification No.:<br>163-16220-00001  | Pages Affected: 5, 28, 30, 31, 33, 34, 35, 43<br>through 48            |
| Issued by: Original Signed by Paul Dubenetzky<br>Paul Dubenetzky, Branch Chief<br>Office of Air Quality  | Issuance Date: May 8, 2003   |

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Unit 2 Natural Gas Fired Certification

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Seasonal Report Forms

Quarterly Compliance Monitoring Report

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and City of Evansville EPA. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a stationary electric utility peaking station.

Responsible Official: Ron Jochum  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
SIC Code: 4911  
County Location: Vanderburgh  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD rules

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) natural gas-fired turbine, identified as Unit #1, with a heat input capacity of 770 million BTU per hour and a maximum generation capacity of 62 Megawatts, and exhausting to stack #1.

[Note: The maximum generation capacity varies with operating conditions, such as temperature and humidity. Therefore, this is an estimate of the maximum generation capacity.]

- (b) One (1) natural gas-fired turbine, identified as Unit #2, with a heat input capacity of 900 million BTU per hour (lower heating value (LHV) at 60EF) and a maximum generation capacity of 80 megawatts, utilizing water injection for NO<sub>x</sub> emissions reduction, and exhausting to stack #2. Fuel oils no.1 and no. 2 will be used as alternative fuels. An inlet fogging system may be used to enhance power production.

### A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21) that have applicable requirements.

### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).



## **SECTION B GENERAL CONDITIONS**

### **B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]**

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

### **B.2 Definitions [326 IAC 2-7-1]**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### **B.3 Permit Term [326 IAC 2-7-5(2)]**

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

### **B.4 Enforceability [326 IAC 2-7-7(a)]**

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and City of Evansville EPA.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.
- (c) All terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by City of Evansville EPA.

### **B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]**

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

### **B.6 Severability [326 IAC 2-7-5(5)]**

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]**

This permit does not convey any property rights of any sort, or any exclusive privilege.

### **B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]**

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
and

City of Evansville EPA

101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

- (b) The Permittee shall furnish to IDEM, OAQ, and City of Evansville EPA within a reasonable time, any information that IDEM, OAQ, and City of Evansville EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAQ, and City of Evansville EPA copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ, and City of Evansville EPA along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and City of Evansville EPA on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, and City of Evansville EPA may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]**  
**[326 IAC 1-6-3]**

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, and City of Evansville EPA upon request and shall be subject to review and approval by IDEM, OAQ, and City of Evansville EPA.

**B.13 Emergency Provisions [326 IAC 2-7-16]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and City of Evansville EPA within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

IDEM Telephone Number: 317-233-5674 (ask for Compliance Section)

IDEM Facsimile Number: 317-233-5967

Evansville EPA Telephone Number: 812-426-5597

Evansville EPA Facsimile Number: 812-426-5399

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA

101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, and City of Evansville EPA may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, and City of Evansville EPA by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**B.14 Permit Shield [326 IAC 2-7-15]**

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.

- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
  - (1) The applicable requirements are included and specifically identified in this permit; or
  - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, and City of Evansville EPA shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, and City of Evansville EPA has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, and City of Evansville EPA has issued the modification. [326 IAC 2-7-12(b)(8)]

**B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]**

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Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

**B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

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- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.
- A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.
- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

**B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, and City of Evansville EPA determines any of the following:
- (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, and City of Evansville EPA to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, and City of Evansville EPA at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, and City of Evansville EPA may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.18 Permit Renewal [326 IAC 2-7-4]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and City of Evansville EPA and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and City of Evansville EPA on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAQ, and City of Evansville EPA, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]  
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, and City of Evansville EPA, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, and City of



Evansville EPA, any additional information identified as being needed to process the application.

- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]  
If IDEM, OAQ, and City of Evansville EPA fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

**B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]**

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

**B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]**

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The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

**B.22 Operational Flexibility [326 IAC 2-7-20]**

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
and  
  
City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708  
  
and  
  
United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590  
  
in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
  - (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.  
  
Such records shall consist of all information required to be submitted to IDEM, OAQ, and City of Evansville EPA in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).
- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

**B.23 Construction Permit Requirement [326 IAC 2]**

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Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

**B.24 Inspection and Entry [326 IAC 2-7-6(2)]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, and City of Evansville EPA U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
  - (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
  - (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.  
[326 IAC 2-7-6(6)]
- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ, and City of Evansville EPA or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ, and City of Evansville EPA nor an authorized representative, may disclose the information unless and until IDEM, OAQ, and City of Evansville EPA makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

- (2) The Permittee, IDEM, OAQ, and City of Evansville EPA acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

**B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]**

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Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch and City of Evansville EPA, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAQ, and City of Evansville EPA shall reserve the right to issue a new permit.

**B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]**

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- (a) The Permittee shall pay annual fees to IDEM, OAQ, and City of Evansville EPA, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

**B.27 Enhanced New Source Review [326 IAC 2]**

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The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

## SECTION C

## SOURCE OPERATION CONDITIONS

|               |
|---------------|
| Entire Source |
|---------------|

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

**C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]**

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

**C.2 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]**

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4, 326 IAC 4-1-6, or MCE 3.30.18.214. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable. MCE 3.30.18.214 is a locally enforceable provision.

**C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]**

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2, 326 IAC 9-1-2 and MCE 3.30.18.214. MCE 3.30.18.214 is a locally enforceable provision.

**C.5 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions) or MCE 3.30.18.212. 326 IAC 6-4-2(4) is not federally enforceable. MCE 3.30.18.212 is a locally enforceable provision.

**C.6 Operation of Equipment [326 IAC 2-7-6(6)]**

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

**C.7 Stack Height [326 IAC 1-7]**

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

**C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]**

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least

thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

## Testing Requirements [326 IAC 2-7-6(1)]

### C.9 Performance Testing [326 IAC 3-6]

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

### C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**C.11 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

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- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

**C.12 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

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- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEM) and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.
- (b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEM shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEM is back in operation.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 326 IAC 10-4.

**C.13 Monitoring Methods [326 IAC 3]**

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Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708



within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, and City of Evansville EPA, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, and City of Evansville EPA, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
  - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAQ, and City of Evansville EPA that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAQ, and City of Evansville EPA that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ, and City of Evansville EPA upon request and shall be subject to review and approval by IDEM, OAQ, and City of Evansville EPA. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
  - (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
  - (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
    - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
    - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
    - (3) An automatic measurement was taken when the process was not operating; or
    - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
  - (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]**

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
- (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- and
- City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and City of Evansville EPA on or before the date it is due.

**C.19 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]**

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM and City of Evansville EPA may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, and City of Evansville EPA representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or City of Evansville EPA makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or City of Evansville EPA within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]**

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- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and City of Evansville EPA on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Stratospheric Ozone Protection**

**C.22 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) natural gas-fired turbine, identified as Unit #1, with a heat input capacity of 770 million BTU per hour and a maximum generation capacity of 62 Megawatts, and exhausting to stack #1.

[Note: The maximum generation capacity varies with operating conditions, such as temperature and humidity. Therefore, this is an estimate of the maximum generation capacity.]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Particulate Matter (PM) [326 IAC 6-1-16(b)]

Pursuant to 326 IAC 6-1-16(b) (Vanderburgh County Particulate Limitations), the gas turbine at SIGECO, identified in 326 IAC 6-1-16(a) as a one hundred (100) percent natural gas burner, shall burn only natural gas.

#### D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The Permittee shall use only natural gas as fuel for Unit #1.
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #1 shall be limited to less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (c) Emissions of Carbon Monoxide (CO) from Unit #1 shall be limited to less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to Unit #1 and is necessary to maintain the status of Unit # 2 as originally permitted, as a PSD minor mod to an existing PSD minor source.

### Compliance Determination Requirements

#### D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee shall perform NO<sub>x</sub> stack testing for Unit 1 to demonstrate compliance with Condition D.1.2(b) not later than February 24, 2002. This testing was done on February 22, 2002 and was conducted utilizing methods as approved by the Commissioner, and in accordance with Section C - Performance Testing.

#### D.1.4 Continuous Emissions Monitoring [326 IAC 3-5]

In order to comply with Condition D.1.2 and pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), a continuous emission monitoring system shall be calibrated, maintained, and operated for measuring NO<sub>x</sub> and CO, which meets the performance specifications of 326 IAC 3-5-2.

#### D.1.5 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]

The Permittee shall meet the monitoring requirements of 326 IAC 10-4-12(b)(1) through (b)(3) that are applicable to their monitoring system for turbine Unit #1 on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.

## **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.1.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be taken monthly and shall be sufficient to document compliance with Condition D.1.2.
- (1) Calendar dates covered in the compliance determination period;
  - (2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5.
  - (3) The total NO<sub>x</sub> and CO emissions for each month; and
  - (4) The weight of NO<sub>x</sub> and CO emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.7 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.1.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

### **D.1.8 Nitrogen Oxides Budget Permit Application Submittal Requirement [326 IAC 10-4-4(a)(1)]**

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For NO<sub>x</sub> budget unit(s) that commenced operation prior to January 1, 2001, the NO<sub>x</sub> authorized account representative shall submit a complete NO<sub>x</sub> budget permit application in accordance with 326 IAC 10-4-7 at least two hundred seventy (270) days prior to May 31, 2004. This application shall be submitted by the NO<sub>x</sub> authorized account representative to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015



## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (b) One (1) natural gas-fired turbine, identified as Unit #2, with a heat input capacity of 900 million BTU per hour (lower heating value (LHV) at 60EF) and a maximum generation capacity of 80 megawatts, utilizing water injection for NO<sub>x</sub> emissions reduction, and exhausting to stack #2. Fuel oils no.1 and no. 2 will be used as alternative fuels. An inlet fogging system may be used to enhance power production.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Annual PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to emission limits established in Installation Permit No. 6078 issued by the Evansville Environmental Protection Agency on May 21, 1980, and a PSD Exemption letter issued by the State of Indiana Air Pollution Control Board on August 29, 1980:

- (a) The Permittee shall use only natural gas or No. 1 or No. 2 distillate oil as fuel for Unit #2.
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #2 shall be limited to less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (c) Emissions of carbon monoxide (CO) from Unit #2 shall be limited to less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (d) Emissions of sulfur dioxide (SO<sub>2</sub>) from Unit #2 shall be limited to less than 0.33 lb/MMBtu when firing distillate oil.
- (e) The input of distillate oil to Unit #2 shall be limited to less than 10,608 thousand gallons (kgal) per twelve (12) consecutive month period with compliance determined at the end of each month.
- (f) The maximum heating value of the fuel oil used shall not exceed 140,000 Btu/gal.

Conditions D.2.1(d) and D.2.1(e) are equivalent to 245 tons/yr of SO<sub>2</sub> emissions. Therefore, the potential to emit NO<sub>x</sub>, CO, and SO<sub>2</sub> from the Unit #2 is each less than 250 tons/yr. Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to the original installation of Unit #2.

#### D.2.2 Inlet Fogging PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The Unit 2 inlet fogging system shall only be used from the first of May to the end of September each year (i.e., the restricted period).
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #2 shall be limited to less than 61.3 tons per restricted period with compliance determined at the end of each month when the inlet fogging system is in use.
- (c) Emissions of carbon monoxide (CO) from Unit #2 shall be limited to less than 131 tons per restricted period with compliance determined at the end of each month when the inlet fogging system is in use.

- (d) The input of distillate oil to Unit 2 shall be limited to less than 1,753 thousand gallons (kgal) per restricted period with compliance determined at the end of each month while the inlet fogging system is in use.

Conditions D.2.2(d) is equivalent to 40.5 tons/yr of SO<sub>2</sub> emissions. These limits are required to limit the net emission increase from the installation of the fogging system to not more than 40 tons of nitrogen oxides (NO<sub>x</sub>), 40 tons sulfur dioxide (SO<sub>2</sub>) and 100 tons of CO per 5 month restricted period. Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to the installation and use of the Unit 2 inlet fogging system.

All fuel fired while the inlet fogging system is in use shall be included in the total fuel use for Unit #2 when demonstrating compliance with Condition D.2.1, to maintain the original permitting status of Unit #2 as a PSD minor modification to an existing PSD minor source.

D.2.3 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from Unit #2 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (gr/dscf).

D.2.4 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1]

Pursuant to Installation Permit No. 6078 issued by the Evansville Environmental Protection Agency on May 21, 1980, the Exemption from PSD Review letter issued by the Indiana Air Pollution Control Board on August 29, 1980, and 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations):

- (a) The sulfur dioxide (SO<sub>2</sub>) emissions from Unit #2 shall not exceed thirty-three hundredths (0.33) pound per MMBtu heat input while combusting distillate fuel oil, and
- (b) Unit 2 shall burn either No. 1 or No. 2 fuel oil with not more than 0.3% sulfur content, or natural gas.

D.2.5 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart GG]

Pursuant to 40 CFR 60, Subpart GG (Stationary Gas Turbines), emissions from Unit #2 shall be limited as follows:

- (a) Nitrogen oxides (NO<sub>x</sub>) emissions, as required by 40 CFR 60.332, shall not exceed:

$$\text{STD} = 0.0075 \frac{(14.4)}{Y} + F,$$

where STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

Water injection shall be used to control NO<sub>x</sub> emissions to the level required by equation stated above. The water injection system shall be operating at the proper injection ratio, as determined by the initial compliance testing, whenever the turbines are in operation except during the 14 minute start-up and 14 minute shutdown periods.

- (b) Sulfur dioxide (SO<sub>2</sub>) emissions, as required by 40 CFR 60.333, shall not exceed 0.015 percent by volume at 15 percent oxygen on a dry basis, or the Permittee shall only use fuel with a sulfur content less than or equal to 0.8 percent by weight.

## Compliance Determination Requirements

### D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

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- (a) Within sixty (60) days after initial start-up of the fogging system, the Permittee shall perform NO<sub>x</sub> stack tests for Unit #2 while firing natural gas. If the Permittee wishes to use distillate oil as an alternate fuel, the Permittee shall also perform NO<sub>x</sub> stack tests while firing distillate oil. Testing shall be conducted with the inlet fogging system in operation at the maximum water injection rate, and without the inlet fogging system in operation. Testing shall be conducted utilizing methods as approved by the Commissioner; and in accordance with Section C - Performance Testing.
- (b) IDEM may require additional compliance testing at any specific time when necessary to determine if the facility is in compliance. If additional testing is required by IDEM, compliance with the PM, SO<sub>2</sub>, and NO<sub>x</sub> limits specified in Conditions D.2.1, D.2.2, D.2.3 and D.2.4 shall be determined by performance tests conducted in accordance with Section C - Performance Testing.

### D.2.7 Sulfur Dioxide Emissions and Sulfur Content

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The Permittee shall demonstrate that the sulfur dioxide (SO<sub>2</sub>) emissions do not exceed thirty-three hundredths (0.33) pound per MMBtu when firing distillate oil and that the sulfur content of the oil does not exceed 0.3% as follows:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall document the sulfur content of the fuel oil by:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance with the SO<sub>2</sub> emission limit may also be determined by one of the following options:
  - (1) Pursuant to 327 IAC 7-2-1(c)(3), the Permittee shall keep the records of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per MMBtu, and submit these reports upon request.
  - (2) Pursuant to 327 IAC 7-2-1(d), compliance may also be determined by conducting a stack test for sulfur dioxide emissions from Unit #2, in accordance with the procedures in 326 IAC 3-6 utilizing procedures outlined in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

**D.2.8 Continuous Monitoring System [326 IAC 12] [40 CFR 60, Subpart GG]**

Pursuant to 40 CFR 60, Subpart GG (Stationary Gas Turbines), a continuous monitoring system for the measurement of fuel consumption and the ratio of water to fuel being fired in the turbine, shall be installed, calibrated, operated, and maintained.

**D.2.9 Continuous Emissions Monitoring [326 IAC 3-5]**

In order to comply with Conditions D.2.1(b), D.2.1(c), D.2.2(b), and D.2.2(c) and pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), a continuous emission monitoring system shall be calibrated, maintained, and operated for measuring NO<sub>x</sub> and CO, which meets the performance specifications of 326 IAC 3-5-2.

**D.2.10 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]**

The Permittee shall meet the monitoring requirements of 326 IAC 10-4-12(b)(1) through (b)(3) that are applicable to their monitoring system for turbine Unit #2 on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

**D.2.11 Visible Emissions Notations**

- (a) Visible emission notations of the Unit #2 stack exhaust shall be performed during normal daylight operations when combusting fuel oil at least once every 100 hours of fuel oil service. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

**D.2.12 Sulfur Content and Nitrogen Content [326 IAC 12] [40 CFR 60, Subpart GG]**

Pursuant to 40 CFR 60.334(b), the Permittee shall monitor the nitrogen and sulfur content of the fuel being fired in Unit #2. The frequency of determination of these values shall be as follows:

- (a) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
- (b) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with the monitoring requirements.

The Permittee shall determine the nitrogen and sulfur content of the fuel pursuant to the methods and procedures specified in 40 CFR 60.335. The sulfur content information obtained

from this monitoring may be used to document compliance with the limit stated in Conditions D.2.1, D.2.2, and D.2.4.

## **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.2.13 Record Keeping Requirements**

---

- (a) To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be taken monthly and shall be sufficient to document compliance with Conditions D.2.1 and D.2.2.
- (1) Calendar dates covered in the compliance determination period;
  - (2) The dates and time of operation of the inlet fogging system;
  - (3) All continuous emissions monitoring data, pursuant to 326 IAC 3-5.
  - (4) The total NO<sub>x</sub> and CO emissions for each month;
  - (5) The weight of NO<sub>x</sub> and CO emitted for each compliance period; and
  - (6) Actual fuel oil usage since the last compliance determination period. Fuel usage records shall differentiate the quantity of fuel used with the inlet fogging system in operation.
- (b) To document compliance with Conditions D.2.1(d), D.2.1(e), D.2.4 and D.2.7, the Permittee shall maintain records in accordance with (1) through (9) below.
- (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period;
  - (3) Calendar month average sulfur content;
  - (4) Monthly averaged heat content of the fuel oil used;
  - (5) Monthly averaged sulfur dioxide emission rate in lb/MMBtu;
  - (6) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and
- If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
- (7) Fuel supplier certifications;
  - (8) The name of the fuel supplier; and
  - (9) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (c) To document compliance with Condition D.2.11, the Permittee shall maintain records of visible emission notations of the Unit #2 stack exhaust when firing distillate oil.
- (d) To document compliance with Condition D.2.12, the Permittee shall maintain records of the nitrogen and sulfur content of all fuels combusted in Unit #2.

- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.2.14 Reporting Requirements

---

- (a) A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) A summary of the information to document compliance with Condition D.2.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after September 30 of each year.
- (c) The Permittee shall submit a semi-annual summary of the following:
  - (1) For nitrogen oxides:
    - (A) One-hour periods during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with Condition D.2.5(a); and
    - (B) Any period during which the fuel bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test.

The summary shall contain the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

- (2) For sulfur dioxides, any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.3 percent by weight.
- (3) For ice fog and emergency fuel as required by 40 CFR 60.334(c)(3) and (4).

The reports in this section shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, in addition to the following address:

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

within thirty (30) days after the end of the six (6) month period being reported.

- (d) To document compliance with Condition D.2.11, the Permittee shall certify, on the form provided, that natural gas was fired in the turbine at all times during the report period. Alternatively, the Permittee shall report the number of days during which an alternate fuel was burned during the report period. The form shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported.

D.2.15 Nitrogen Oxides Budget Permit Application Submittal Requirement [326 IAC 10-4-4(a)(1)]

For NO<sub>x</sub> budget unit(s) that commenced operation prior to January 1, 2001, the NO<sub>x</sub> authorized account representative shall submit a complete NO<sub>x</sub> budget permit application in accordance with 326 IAC 10-4-7 at least two hundred seventy (270) days prior to May 31, 2004. This application shall be submitted by the NO<sub>x</sub> authorized account representative to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**OFFICE OF AIR QUALITY**

**COMPLIANCE BRANCH**

**P.O. Box 6015**

**100 North Senate Avenue**

**Indianapolis, Indiana 46206-6015**

**Phone: 317-233-5674 Fax: 317-233-5967**

**CITY OF EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY**

**101 N.W. Martin Luther King Jr., Room 250**

**Evansville, Indiana 47708**

**Phone: 812-426-5597 Fax: 812-426-5399**

**PART 70 OPERATING PERMIT**

**EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2

- 9** 1. This is an emergency as defined in 326 IAC 2-7-1(12)
- ☐ The Permittee must notify the Office of Air Quality (OAQ), within four **(4)** business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- ☐ The Permittee must submit notice in writing or by facsimile within two **(2)** days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

- 9** 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
- ☐ The Permittee must submit notice in writing within ten **(10)** calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

|   |
|---|
| Date/Time Emergency/Deviation started:  |
| Date/Time Emergency/Deviation was corrected:  |
| Was the facility being properly operated at the time of the emergency/deviation?    Y    N<br>Describe:   |
| Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:   |
| Estimated amount of pollutant(s) emitted during emergency/deviation:  |
| Describe the steps taken to mitigate the problem:   |
| Describe the corrective actions/response steps taken:   |
| Describe the measures taken to minimize emissions:  |
| If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: |

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**PART 70 OPERATING PERMIT  
UNIT 2 NATURAL GAS FIRED CERTIFICATION**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Permit Mod No.: 163-14083-00001

**This certification shall be included when submitting monitoring, testing reports/results  
or other documents as required by this permit.**

Report period

Beginning: \_\_\_\_\_

Ending: \_\_\_\_\_

Unit Affected: CT 2

Alternate Fuel

Days burning alternate fuel

From

To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Data Section**

**Part 70 Quarterly Report**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Facility: Natural Gas Turbine Unit 1  
Parameter: NOx emissions  
Limit: Less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

| Month   | Column 1   | Column 2           | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
|         | This Month | Previous 11 Months | 12 Month Total      |
| Month 1 |            |                    |                     |
| Month 2 |            |                    |                     |
| Month 3 |            |                    |                     |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Data Section**

**Part 70 Quarterly Report**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Facility: Natural Gas Turbine Unit 1  
Parameter: CO emissions  
Limit: Less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

| Month   | Column 1   | Column 2           | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
|         | This Month | Previous 11 Months | 12 Month Total      |
| Month 1 |            |                    |                     |
| Month 2 |            |                    |                     |
| Month 3 |            |                    |                     |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**Compliance Data Section**

**Part 70 Quarterly Report**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Facility: Turbine Unit #2  
Parameter: NOx emissions  
Limit: Less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

| Month   | Column 1   | Column 2           | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
|         | This Month | Previous 11 Months | 12 Month Total      |
| Month 1 |            |                    |                     |
| Month 2 |            |                    |                     |
| Month 3 |            |                    |                     |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**Compliance Data Section**

**Part 70 Quarterly Report**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Facility: Turbine Unit #2  
Parameter: CO emissions  
Limit: Less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

| Month   | Column 1   | Column 2           | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
|         | This Month | Previous 11 Months | 12 Month Total      |
| Month 1 |            |                    |                     |
| Month 2 |            |                    |                     |
| Month 3 |            |                    |                     |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report: Unit #2 Distillate Oil**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Facility: Natural Gas/Fuel Oil Turbine (Unit #2)  
Parameter: Distillate Oil Usage  
Limits: 10,608 thousand gallons of distillate fuel oil used per 12 consecutive month period  
with compliance determined at the end of each month

YEAR: \_\_\_\_\_

| Month | Distillate Oil Usage<br>This Month<br>(kgals) | Distillate Oil Usage<br>Previous 11 Months<br>(kgals) | Total Distillate Oil Usage<br>for 12 Month Period<br>(kgals) | Usage<br>Limit<br>(kgals) |
|-------|---|---|--|---------------------------|
|       |   |   |  | 10,608                    |
|       |   |   |  | 10,608                    |
|       |   |   |  | 10,608                    |

**9** No deviation occurred in this quarter.

**9** Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Seasonal Inlet Fogging Report: Natural Gas**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T 163-6899-00001  
Facility: Natural Gas/Fuel Oil Turbine with Inlet Fogging in Use (Unit 2)  
Parameter: NO<sub>x</sub> Emissions  
Limit: Less than 61.3 tons per 5 consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

| Month                            | May | June | July | August | September | Season Total | Season Limit              |
|----------------------------------|-----|------|------|--------|-----------|--------------|---------------------------|
| NO <sub>x</sub> Emissions (Tons) |     |      |      |        |           |              | 61.0 tons NO <sub>x</sub> |

- 9** No deviation occurred in this quarter.  
**9** Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**Attach a signed certification to complete this report.**

**This form is due within thirty (30) days after September 30.**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Seasonal Inlet Fogging Report: Natural Gas**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T 163-6899-00001  
Facility: Natural Gas/Fuel Oil Turbine with Inlet Fogging in Use (Unit 2)  
Parameter: CO Emissions  
Limit: Less than 131 tons per 5 consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

| Month               | May | June | July | August | September | Season Total | Season Limit  |
|---------------------|-----|------|------|--------|-----------|--------------|---------------|
| CO Emissions (Tons) |     |      |      |        |           |              | 131.0 tons CO |

- 9** No deviation occurred in this quarter.  
**9** Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**Attach a signed certification to complete this report.**

**This form is due within thirty (30) days after September 30.**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Seasonal Inlet Fogging Report: Distillate Oil**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Facility: Natural Gas/Fuel Oil Turbine with Inlet Fogging in Use (Unit #2)  
Parameter: Distillate Oil Usage  
Limits: 1,753 kgals of distillate fuel oil used per 5 consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

| Month                                  | May | June | July | August | September | Season Total | Season Limit |
|--|-----|------|------|--------|-----------|--------------|--------------|
| Distillate Oil Usage This Month (kgal) |     |      |      |        |           |              | 1,753 kgals  |

**9** No deviation occurred in this period.

**9** Deviation/s occurred in this period.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**Attach a signed certification to complete this report.**

**This report is due within thirty (30) days after September 30.**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**PART 70 OPERATING PERMIT  
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

| Compliance Monitoring Requirement<br>(e.g. Permit Condition D.1.3) | Number of Deviations | Date of each Deviation |
|--|----------------------|------------------------|
|  |                      |                        |
|  |                      |                        |
|  |                      |                        |
|  |                      |                        |
|  |                      |                        |
|  |                      |                        |

Form Completed By: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## **Indiana Department of Environmental Management Office of Air Quality**

### **Addendum to the Technical Support Document for Part 70 Significant Permit Modification**

#### **Source Background and Description**

|                                      |   |
|--------------------------------------|---|
| Source Name:                         | Southern Indiana Gas and Electric Company<br>Broadway Avenue Generating Station |
| Source Location:                     | 2600 Broadway Avenue, Evansville, Indiana 47712                                 |
| County:                              | Vanderburgh   |
| SIC Code:                            | 4911  |
| Operation Permit No.:                | T163-6899-00001   |
| Operation Permit Issuance Date:      | February 10, 1999   |
| Significant Permit Modification No.: | 163-16220-00001   |
| Permit Reviewer:                     | ERG/YC  |

On March 6, 2003, the Office of Air Quality (OAQ) had a notice published in the Evansville Courier, Evansville Indiana, stating that Southern Indiana Gas and Electric Company had applied for a Part 70 Significant Permit Modification to revise the emission limit for turbine Unit # 2. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 19, 2003, Mr. Derrick Ohning at City of Evansville, Environmental Protect Agency (referred to as "Evansville EPA") submitted comments on the proposed Significant Permit Modification (SPM). On March 28, 2003, Mr. Stephen A. Loeschner 9 (referred to as "the commenter") also submitted comments on the proposed SPM. The summary of these comments is as follows:

#### **Comment 1:**

Evansville EPA indicated that the stack testing date for turbine Unit #1 in Condition D.1.3 should be February 24, 2002, instead of February 24, 2001.

#### **Response to Comment 1:**

This stack testing deadline for turbine Unit #1 was established in Administrative Amendment #163-14977-00001, issued on November 2, 2001. Condition D.1.3 required that the stack testing for Unit #1 to be conducted within 180 days plus 5 weeks of the issuance of First SPM #163-14083-00001, which was issued on July 19, 2001. Therefore, this testing deadline should be February 24, 2002, instead of 2001. Therefore, IDEM, OAQ has made the following correction to Condition D.1.3:

**D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]**

The Permittee shall perform NO<sub>x</sub> stack testing for Unit 1 to demonstrate compliance with Condition D.1.2(b) not later than February 24, ~~2001~~**2002**. This testing was done on February 22, 2002 and was conducted utilizing methods as approved by the Commissioner, and in accordance with Section C - Performance Testing.

**Comment 2:**

Evansville EPA suggested to use the term “a continuous emission monitoring system”, instead of “a continuous monitoring system” in Condition D.1.4 (Continuous Emissions Monitoring), in order to distinguish this requirement from the continuous fuel consumption and water to fuel ratio monitoring requirements referred in Condition D.2.8.

**Response to Comment 2:**

For clarification purposes, IDEM, OAQ has made the following revisions to Condition D.1.4 and D.2.9:

**D.1.4 Continuous Emissions Monitoring [326 IAC 3-5]**

In order to comply with Condition D.1.2 and pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), a continuous **emission** monitoring system shall be calibrated, maintained, and operated for measuring NO<sub>x</sub> and CO, which meets the performance specifications of 326 IAC 3-5-2.

**D.2.9 Continuous Emissions Monitoring [326 IAC 3-5]**

In order to comply with Conditions ~~D.2.1(a)~~, D.2.1(b), ~~D.2.2(a)~~, D.2.1(c), and ~~D.2.2(b)~~, and **D.2.2(c)**, and pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), a continuous **emission** monitoring system shall be calibrated, maintained, and operated for measuring NO<sub>x</sub> and CO, which meets the performance specifications of 326 IAC 3-5-2.

**Comment 3:**

For NO<sub>x</sub> emission limits, the commenter asked why the following revisions for turbine Unit #2 were made in the proposed SPM:

- (a) The NO<sub>x</sub> emission limit has been increased from 0.13 lb/MMBtu to 0.21 lb/MMBtu.
- (b) The removal of the natural gas usage limit.
- (c) The annual NO<sub>x</sub> emission limit has been increased from 240 tons/yr to 250 tons/yr.
- (d) The NO<sub>x</sub> emission limit has been increased from 60.85 tons/yr to 61.3 tons/yr during the restricted period.

The commenter also requested IDEM, OAQ to provide the actual annual natural gas usage in Unit #2 from January 1999 through the present.

**Comment 4:**

Evansville EPA stated that the NO<sub>x</sub> emissions from turbines are strongly affected by operating conditions, such as temperature and humidity. The stack test conducted in 1981 for turbine Unit #2 shows a result of 0.34 lb/MMBtu for NO<sub>x</sub> emissions, which exceeds the proposed NO<sub>x</sub> emission limit of 0.205 lb/MMBtu in this SPM. Evansville EPA suspected that the source would have to revise this NO<sub>x</sub> emission limit constantly when the stack test is performed under different operating conditions (for example, under a different temperature). Evansville EPA requested IDEM, OAQ to reevaluate the proposed lb/MMBtu NO<sub>x</sub> emission limit. Evansville EPA also commented that there was no

corresponding recordkeeping and reporting requirements associated with the lb/MMBtu limits in the proposed SPM.

#### Response to Comment 3 and Comment 4:

The NO<sub>x</sub> emission limit for Unit #2 was increased from 240 tons/yr to 250 tons/yr because this limit was set to make the installation of Unit #2 a PSD minor modification. The previous emission limit of 240 tons/yr was established based on the natural gas usage limit, the maximum heating value of natural gas, and the lb/MMBtu emission limit for NO<sub>x</sub>. Since turbine Unit #2 will be required to install NO<sub>x</sub> and CO continuous emission monitoring systems (CEMs), the Permittee will be able to monitor and record the actual NO<sub>x</sub> and CO emissions precisely. Therefore, Unit #2 has been permitted up to 250 ton/yr of NO<sub>x</sub> emissions, which will maintain PSD minor modification status. The same reason is used for the adjustment of the NO<sub>x</sub> emission limit during the restricted period from 60.85 tons per year to 61.3 tons per year.

The annual natural gas usage in turbine Unit #2 from 1999 are listed in the table below:

| year | Natural Gas Usage (MMCF/yr) | Fuel Oil Usage (gal/yr) | *Equivalent NO <sub>x</sub> Emissions (tons/yr) |
|------|-----------------------------|-------------------------|---|
| 1999 | 523.5                       | 0.0                     | 89.0  |
| 2000 | 386.2                       | 0.0                     | 65.7  |
| 2001 | 444.2                       | 0.0                     | 75.5  |

\* Note: The equivalent NO<sub>x</sub> emissions are calculated based on a heating value of 1,000 MMBtu/MMCF for natural gas and a NO<sub>x</sub> emission factor of 0.34 lb/MMBtu (from the stack test result in 1981).

Upon further review, IDEM, OAQ has determined that the lb/MMBtu limits for NO<sub>x</sub> and CO are not necessary because: (1) there is no specific lb/MMBtu limit in state rules or federal rules for combustion turbines; (2) the Permittee is required to monitor the NO<sub>x</sub> and CO emissions from Unit #2 with CEMs after the issuance of this SPM. The limitations on natural gas usage and the lb/MMBtu NO<sub>x</sub> and CO emission limits were previously needed to calculate the NO<sub>x</sub> and CO emissions from Unit #2, in order to demonstrate compliance with the PSD minor limits. Since CEMs will provide sufficient information to demonstrate compliance with the annual NO<sub>x</sub> and CO emission limits, and the total NO<sub>x</sub> and CO emissions limit for restricted period, IDEM, OAQ has made the following revisions to remove the NO<sub>x</sub> and CO lb/MMBtu limits for Unit #1 and Unit #2:

#### D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- 
- (a) The Permittee shall use only natural gas as fuel for Unit #1.
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #1 shall **be limited to less than** ~~not exceed 0.545 lb/MMBtu and~~ 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (c) Emissions of Carbon Monoxide (CO) from Unit #1 shall **be limited to less than** ~~not exceed 0.084 lb/MMBtu and~~ 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to Unit #1 and is necessary to maintain the status of Unit # 2 as originally permitted, as a PSD minor mod to an existing PSD minor source.

**D.2.1 Annual PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]**

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Pursuant to emission limits established in Installation Permit No. 6078 issued by the Evansville Environmental Protection Agency on May 21, 1980, and a PSD Exemption letter issued by the State of Indiana Air Pollution Control Board on August 29, 1980:

- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #2 shall **be limited to less than not exceed 0.21 lb/MMBtu** and 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (c) Emissions of carbon monoxide (CO) from Unit #2 shall **be limited to less than not exceed 0.084 lb/MMBtu** and 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

**D.2.2 Inlet Fogging PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]**

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- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #2 shall **be limited to less than not exceed 0.21 lb/MMBtu** and 61.3 tons per restricted period with compliance determined at the end of each month when the inlet fogging system is in use.
- (c) Emissions of carbon monoxide (CO) from Unit #2 shall **be limited to less than not exceed 0.084 lb/MMBtu** and 131 tons per restricted period with compliance determined at the end of each month when the inlet fogging system is in use.

Since the NO<sub>x</sub> and CO lb/MMBtu limits have been removed, there will be no corresponding record keeping or reporting requirements associated with these lb/MMBtu limits.

**Comment 5:**

For SO<sub>2</sub> emission limits, the commenter asked why the following changes were made for turbine Unit #2 in the proposed SPM:

- (a) The SO<sub>2</sub> emission limit for the restricted period has been increased from 39.5 tons per restrict period to 40.4 tons per restricted period.
- (b) The SO<sub>2</sub> emission limit has been increased from 225 tons/yr to 245 tons/yr.

The commenter also stated that the SO<sub>2</sub> emission limits were calculated based on fuel oil usage and the maximum heating value of the fuel oil. The commenter proposed to set a condition to limit the maximum heating value of the fuel oil to 143,000 Btu/gal for the fuel oil used in Unit #2, and to adjust the fuel oil usage limits based on the proposed heating value limit.

**Response to Comment 5:**

The maximum heating value used to compute the fuel oil usage limit in the first SPM #163-14083-00001 (issued on July 19, 2001) was 129,000 Btu/gal. In the proposed SPM, the OAQ adjusted the fuel oil usage limits for Unit #2 based on a heating value of 140,000 Btu/gal, which is considered the maximum heating value of No.1 and No.2 fuel oil in general cases. Fuel oil is the back-up fuel for Unit #2 and the Permittee did not use any fuel oil in this unit for at least the past five (5) years. Using a higher heating value of 143,000 Btu/gal will decrease the fuel oil usage limits for Unit #2 slightly. However, this source does not typically use fuel oil in Unit #2, and is unlikely to use No.1 and No.2 fuel oil at an amount close to the current usage limits. Therefore, IDEM, OAQ believes that a heating value of 140,000 Btu/gal is a reasonable and sufficient assumption for the fuel oil used in Unit #2.

The SO<sub>2</sub> emission limits were adjusted slightly in this SPM due to the change in the fuel oil heating value. After this adjustment, the installation of Unit #2 and the use of the inlet fogging system still maintain PSD minor modification status. In addition, the fuel oil usage limits actually decrease in the



proposed SPM. The equivalent annual SO<sub>2</sub> emissions increase due to the assumption of using a fuel oil with a higher heating value.

In order to state clearly that the maximum heating value of the fuel oil used in Unit #2 shall not exceed 140,000 Btu/hr, IDEM, OAQ has made the following revisions to Conditions D.2.1 and D.2.2:

**D.2.1 Annual PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]**

- (d) Emissions of sulfur dioxide (SO<sub>2</sub>) from Unit #2 shall **be limited to less than** ~~not exceed~~ 0.33 lb/MMBtu when firing distillate oil ~~with a maximum heating value of 140,000 Btu/gal.~~
- (e) The input of distillate oil to Unit #2 shall **be limited to less than** ~~not exceed~~ 10,608 thousand gallons (kgal) per twelve (12) consecutive month period with compliance determined at the end of each month.
- (f) **The maximum heating value of the fuel oil used shall not exceed 140,000 Btu/gal.**

**D.2.2 Inlet Fogging PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]**

- ~~(d) Emissions of sulfur dioxide (SO<sub>2</sub>) from Unit #2 shall not exceed 0.33 lb/MMBtu when firing distillate oil which has a maximum heating value of 140,000 Btu/gal, with the inlet fogging system in use.~~
- (ed)** The input of distillate oil to Unit 2 shall ~~not exceed~~ **be limited to less than** 1,753 thousand gallons (kgal) per restricted period with compliance determined at the end of each month while the inlet fogging system is in use.

Conditions D.2.2(d) ~~is and D.2.2(e) are~~ equivalent to 40.5 tons/yr of SO<sub>2</sub> emissions. These limits are required to limit the net emission increase from the installation of the fogging system to not more than 40 tons of nitrogen oxides (NO<sub>x</sub>), ~~39.5~~ **40** tons sulfur dioxide (SO<sub>2</sub>) and 100 tons of CO per 5 month restricted period. Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to the installation and use of the Unit 2 inlet fogging system.

[Note that the heating value requirement and the SO<sub>2</sub> emission factor limit of 0.33 lb/MMBtu in Condition D.2.2(d) have been removed since these are duplicate requirements of Conditions D.2.1(d) and D.2.1(f)].

**Comment 6:**

In Condition D.2.4(a) and (b), the Permittee is required to limit the SO<sub>2</sub> emissions to less than 0.33 lb/MMBtu and to limit the sulfur content in the fuel oil to less than 0.3%. The commenter stated that Condition D.2.7 only ensures compliance with the 0.3% sulfur content, but no corresponding compliance method was established to demonstrate compliance with the 0.33 lb/MMBtu SO<sub>2</sub> emission limit.

**Response to Comment 6:**

IDEM has made the following revisions to Conditions D.2.7 to detail the compliance determination methods for the SO<sub>2</sub> emission limit of 0.33 lb/MMBtu.

**D.2.7 Sulfur Dioxide Emissions and Sulfur Content**

The Permittee shall demonstrate that the sulfur dioxide (SO<sub>2</sub>) emissions do not exceed thirty-three hundredths (0.33) pound per MMBtu when firing distillate oil and that the sulfur content of the oil does not exceed 0.3%, ~~utilizing one or more of the following options:~~ **as follows:**

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall document the sulfur content of the fuel oil by:

- (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
  - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
  - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance with the SO<sub>2</sub> emission limit may also be determined by ~~conducting a stack test for sulfur dioxide emissions from Unit #2, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) above. [326 IAC 7-2-1(b)]~~ **one of the following options:**
  - (1) **Pursuant to 327 IAC 7-2-1(c)(3), the Permittee shall keep the records of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per MMBtu, and submit the these reports upon request.**
  - (2) **Pursuant to 327 IAC 7-2-1(d), compliance may also be determined by conducting a stack test for sulfur dioxide emissions from Unit #2, in accordance with the procedures in 326 IAC 3-6 utilizing procedures outlines in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8.**

In order to demonstrate compliance with Condition D.2.7, IDEM also made the following revisions to Conditions D.2.13(b) to reflect the corresponding record keeping requirements:

#### D.2.13 Record Keeping Requirements

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- (b) To document compliance with Conditions **D.2.1(d), D.2.1 (e)**, D.2.4 and D.2.7, the Permittee shall maintain records in accordance with (1) through ~~(69)~~ below.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period ~~and equivalent sulfur dioxide emissions;~~
  - (3) **Calendar month average sulfur content;**
  - (4) **Monthly averaged heat content of the fuel oil used;**
  - (5) **Monthly averaged sulfur dioxide emission rate in lb/MMBtu;**
  - ~~(36)~~ A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

  - ~~(47)~~ Fuel supplier certifications;
  - ~~(58)~~ The name of the fuel supplier; and

(69) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

**Comment 7:**

CO emissions from turbine Unit #2 are limited to less than 250 tons/yr and 131 tons per restricted period. The commenter suspected that the source will try to expel the more restrictive CO limitation during the restricted period for Unit #2. The commenter also stated that the 3.5% CO concentration in the exhaust, which was stated in the technical support document as the recent stack test result for Unit #2, is a lethal concentration for human health.

**Comment 8:**

Evansville EPA indicated that the stack test result summary table in the Technical Support Document (TSD) incorrectly lists CO<sub>2</sub> emissions as CO emissions. In the proposed SPM, the CO and NO<sub>x</sub> emissions from Unit #2 were each limited to less than 250 tons/yr. Evansville EPA stated that by the time Unit #2 emitted 250 tons/yr of CO, the NO<sub>x</sub> emissions from Unit #2 would have exceeded 250 ton/yr.

**Response to Comment 7 and Comment 8:**

The pollutants being tested in the stack test on August 20, 2002 for Unit #2 were NO<sub>x</sub> and CO<sub>2</sub>. The source did not test the CO emissions from this unit. Therefore, IDEM has made the following correction to the stack testing result table on page 2 of TSD:

|                        | CO <sub>2</sub> Emissions<br>(% by volume) | NO <sub>x</sub> Emissions<br>(lb/MMBtu) |
|------------------------|--|---|
| Without Fogging System | 3.50                                       | 0.205                                   |
| With Fogging System    | 3.51                                       | 0.197                                   |

Both the commenter and Evansville EPA have concerns that the Permittee will tend to comply with the less stringent conditions in the permit. However, the source is required to comply with every condition in the permit. In addition, the CO emissions from Unit #2 might not always be less than the NO<sub>x</sub> emissions, if the Permittee installs NO<sub>x</sub> emission control devices in the future. Therefore, IDEM, OAQ believes that the CO emission limits for Unit #2 should be 250 tons/yr and 131 tons per restricted period, which will not violate the PSD minor modification status for this unit.

**Comment 9:**

The commenter asked why the PM emission limits of 1.74 tons/yr and 0.03 gr/dscf for turbine Unit #1 were removed in the second Administrative Amendment #163-16523-00001, issued on February 11, 2003. The commenter also asked if there was any PM stack test conducted for Unit #1 and when it was conducted. The commenter requested to add a periodic PM emission test requirement and a corresponding record keeping requirement for Unit #1 to demonstrate compliance with the PM emission limits of 1.74 ton/yr and 0.03 gr/dscf for turbine Unit #1.

**Response to Comment 9:**

In the source's Title V permit (#163-6899-00001, issued on February 10, 1999), the PM emissions from turbine Unit #1 were limited to 1.74 tons/yr and 0.03 gr/dscf, pursuant to the previous version of rule 326 IAC 6-1-16 (Vanderburgh County Particulate Limitations). However, rule 326 IAC 6-1-16 was revised in 2001 and the emission limits of 1.74 ton/yr and 0.03 gr/dscf were removed. Pursuant to current 326 IAC 6-1-16(b), the 100% natural gas burner (Unit #1) at SIGECO shall burn natural gas only. Therefore, IDEM revised Condition D.1.1 as follows in Administrative Amendment #163-16523-00001 (issued on February 11, 2003), and these changes will be incorporated in this SPM.

**D.1.1 Particulate Matter (PM) [326 IAC 6-1-16(b)]**

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- (a) Pursuant to 326 IAC 6-1-16(b) (Vanderburgh County Particulate Limitations), ~~the particulate matter emissions from Unit #1 shall not exceed 0.001 grains per dry standard cubic foot (gr/dscf);~~ **the gas turbine at SIGECO, identified in 326 IAC 6-1-16(a) as a one hundred (100) percent natural gas burner, shall burn only natural gas.**
- (b) ~~Pursuant to 326 IAC 6-1-16 (Vanderburgh County Particulate Limitations), the particulate matter emissions from Unit #1 shall not exceed 1.74 tons per year.~~

No PM stack test has been conducted for Unit #1. Since there will be no specific PM emission limitations associated with Unit #1, no record keeping or stack testing requirements will be required.

**Comment 10:**

The PM emissions from turbine Unit #2 are limited to less than 0.03 gr/dscf. The commenter asked why there is no PM stack testing requirement associated with this PM limit and when was the last PM emission test conducted for this unit. The commenter also pointed out that a PM emission limit of 23 tons/yr for Unit #2, which was established in the construction permit in 1980, was not included in the current Title V permit.

The stack tests conducted for turbines Unit #1 and #2 recently showed that the actual NO<sub>x</sub> emission factors for these two units were higher than the "A" rated NO<sub>x</sub> emission factor in AP-42. The commenter stated that the PM emission factor in AP-42 for turbines is rated "C", therefore, the PM emission factor in AP-42 would be less reliable and should not be used to predict the potential to emit PM of these two (2) units. The commenter requested to add an annual PM emission limit and corresponding stack testing requirements for Unit #2.

**Response to Comment 10:**

A PM emission limit of 23 tons/yr for Unit #2 was set in Construction Permit #163-6078-00001, issued on May 21, 1980. This condition was removed in the source's Title V permit (#163-6899-00001, issued on February 10, 1999) because the potential to emit PM from this unit was much less than 250 tons/yr and there are no other federal or state rules requesting a specific annual PM emission limit for this unit.

Currently, the PM emissions from Unit #2 are limited to 0.03 gr/dscf, pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations). There was no PM emission test conducted for Unit #2. However, No. 1 and No. 2 fuel oil are the back-up fuels for Unit #2, and this unit did not combust any fuel oil for at least the past five (5) years. Natural gas is a clean fuel and the PM emissions from the natural gas combustion are unlikely to exceed 0.03 gr/dscf. Therefore, IDEM, OAQ believes a PM stack test for Unit #2 is not critical for Unit #2 to demonstrate compliance with the PM emission limit of 0.03 gr/dscf. However, pursuant to D.2.2(b) in the proposed SPM, IDEM may require the source to conduct a PM emission test for Unit #2 when necessary. No changes have been made as a result of this comment.

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
City of Evansville Environmental Protection Agency**

**Technical Support Document (TSD) for a  
Part 70 Significant Permit Modification**

**Source Background and Description**

|                                      |   |
|--------------------------------------|---|
| Source Name:                         | Southern Indiana Gas and Electric Company<br>Broadway Avenue Generating Station |
| Source Location:                     | 2600 Broadway Avenue, Evansville, Indiana 47712                                 |
| County:                              | Vanderburgh   |
| SIC Code:                            | 4911  |
| Operation Permit No.:                | T163-6899-00001   |
| Operation Permit Issuance Date:      | February 10, 1999   |
| Significant Permit Modification No.: | 163-16220-00001   |
| Permit Reviewer:                     | ERG/YC  |

The Office of Air Quality (OAQ) has reviewed a modification application from Southern Indiana Gas and Electric Company, Broadway Avenue Generating Station relating to revising the NO<sub>x</sub> emission limits for turbine Unit #2.

**History**

Turbine Unit #2 is a natural gas fired turbine with No.1 and No.2 fuel oil as alternative fuels. This unit was permitted to construct under CP# 163-6078-00001 on August 29, 1980 and the emissions from this unit were limited to less than 250 tons/yr via the fuel usage limits. Southern Indiana Gas and Electric Company, Broadway Avenue Generating Station (SIGECO) was issued a Part 70 Permit (#168-6899-00001) on February 10, 1999. An inlet fogging system was permitted to be on Unit #2 in SSM #163-12400-00001, issued on July 19, 2001.

Turbine Unit #2 is not subject to Title IV requirements (40 CFR 72)(Acid Rain Program) because it is a simple cycle combustion turbine that commenced operation before November 15, 1990, and has not added or used auxiliary firing after that date (40 CFR 72.6(b)(1)).

On October 15, 2002, SIGECO submitted an application to the OAQ requesting a revision to the NO<sub>x</sub> emission rate limit and the natural gas usage limit for turbine Unit #2, based on the stack testing results on August 20, 2002.

**Explanation of Modification**

**1. The modification of NO<sub>x</sub> emission rate limit:**

Based on the stack test performed on August 20, 2002, the Permittee requested to revise the NO<sub>x</sub> emission rate limit for turbine Unit #2 from 0.13 lbs/MMBtu to 0.21 lbs/MMBtu. A summary of the stack test results for turbine Unit #2 are listed in the table below:

|                        | CO Emissions<br>(% by volume) | NO <sub>x</sub> Emissions<br>(lbs/MMBtu) |
|------------------------|-------------------------------|--|
| Without Fogging System | 3.50                          | 0.205                                    |
| With Fogging System    | 3.51                          | 0.197                                    |

Therefore, Unit #2 will comply with the revised NO<sub>x</sub> emission rate limit of 0.21 lbs/MMBtu.

2. The modification of natural gas usage limit:

The unlimited potential to emit of NO<sub>x</sub>, SO<sub>2</sub>, and CO from Unit #2 is greater than 250 tons/yr. The NO<sub>x</sub> and CO emissions are mainly from natural gas combustion and the SO<sub>2</sub> emissions are from the fuel oil combustion (back-up fuel). In order to demonstrate compliance with the emission limits for NO<sub>x</sub>, SO<sub>2</sub>, and CO, natural gas and fuel oil usage limits were established in the source's Part 70 permit (#163-6899-00001, issued February 10, 1999).

Pursuant to 326 IAC 3-5-1(d)(1) and 326 IAC 2-7-6, IDEM, OAQ is now requiring Continuous Emission Monitoring (CEM) Systems for CO and NO<sub>x</sub> to be installed on Unit #2. In addition, Unit #2 has a maximum generating capacity of 80 megawatts (MW) and commenced operation before January 1, 1997. Therefore, Unit #2 is subject to the requirements of 326 IAC 10-4 (NO<sub>x</sub> Budget Trading Program). Pursuant to 326 IAC 10-4-12(c), the Permittee shall install the appropriate monitoring systems and complete all certification tests as required by 326 IAC 10-4-12(b)(1) through (3) on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003.

Because CEMs are required for CO and NO<sub>x</sub>, the natural gas usage limits for Unit #2 do not provide any additional compliance assurance. Therefore, the natural gas usage limits for Unit #2 have been removed in this Significant Permit Modification (SPM). The natural gas usage in the source's Part 70 permit effectively limited the CO emissions from Unit #2 to less than 250 tons/yr, but there was no specific CO emission limit. Therefore, a limit for Unit #2 has been added that limits CO emissions to less than 0.084 lbs/MMBtu and 250 tons/yr.

3. Maximum heating value of fuel oils:

Upon further review, IDEM, OAQ has determined that a maximum heating value of 140,000 Btu/gal for the fuel oil used in Unit #2 shall be specified in the permit because the SO<sub>2</sub> emission limit of 250 tons/yr is based on the fuel oil usage limit (10,608 kgal/yr), SO<sub>2</sub> emission rate limit (0.33 lbs/MMBtu), and the heating value of the fuel oil as follows:

$$10,608 \text{ kgal/yr} \times 1,000 \text{ kgal/gal} \times 140,000 \text{ Btu/gal} \times 1 \text{ MMBtu}/1,000,000 \text{ Btu} \times 0.33 \text{ lbs/MMBtu} \times 1 \text{ tons}/2000 \text{ lbs} = 245 \text{ tons/yr}$$

4. Condition D.2.2 - Inlet Fogging PSD Minor Limit:

Condition D.2.2 was established in SSM #163-12400-00001, issued on July 19, 2001, to limit the net emission increase of the installation of the inlet fogging system to less than the PSD significant modification thresholds. According to the technical support document for SSM #163-12400-00001, issued on July 19, 2001, the allowable emissions from unit #2 when using the fogging system were:

| Pollutants                                  | NO <sub>x</sub><br>(tons/yr) | SO <sub>2</sub><br>(tons/yr) | CO<br>(tons/yr) |
|---|------------------------------|------------------------------|-----------------|
| Actual Emissions<br>(Ave. of 1999 and 2000) | 21.35                        | 0.55                         | 31              |
| PSD Significant Thresholds                  | 40                           | 40                           | 100             |
| Allowable Emissions                         | 61.35                        | 40.55                        | 131             |

The inlet fogging system was permitted such that this system was only to be used during the 5-month restricted period (May 1 through September 30). Therefore, emissions during the restricted period were limited to less than 61.3 tons of NO<sub>x</sub>, 40.5 tons of SO<sub>2</sub>, and 131 tons of CO. Since turbine Unit #2 is required to install CEM to monitor NO<sub>x</sub> and CO emissions, the natural gas usage limit for the 5-month restricted period will be removed as part of this Significant Permit Modification. However, an emission limit of 131 tons of CO for the 5-month restricted period and an emission rate limit of 0.084 lbs/MMBtu of CO will be added to this Significant Permit Modification.

In addition, based on the maximum heating value of 140,000 Btu/gal, the fuel oil usage limit for the 5-month restricted period shall be revised from 1,888 kgal to 1,753 kgal as shown below:

$$40.5 \text{ tons} \times 2000 \text{ lbs/ton} / 0.33 \text{ lbs/MMBtu} / (140,000 \text{ Btu/gal} \times 1 \text{ MMBtu}/1,000,000 \text{ Btu}) \\ = 1,753,247 \text{ gal} = 1,753 \text{ kgal}$$

#### Enforcement Issue

- (a) IDEM is aware that the NO<sub>x</sub> emissions from Unit #2 exceed the emission limit of 0.13 lbs/MMBtu established in the first Significant Source Modification #163-12400-00001, issued July 19, 2001.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

#### Justification for the Modification

The Part 70 operating permit is being modified through a Part 70 Significant Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-12(d)(1) as this is a modification to change Part 70 permit conditions for which there is no corresponding underlying applicable requirement and that the Permittee has assumed to make PSD review not applicable. Therefore, pursuant to 326 IAC 2-7-12(b)(D), this modification may not be processed as a minor permit modification.

#### Recommendation

The staff recommends to the Commissioner that the Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 15, 2002. Additional information was received on October 31, 2002 and November 19, 2002.

## Proposed Changes

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

- (b) One (1) natural gas-fired turbine, identified as Unit #2, with a heat input capacity of 900 million BTU per hour (lower heating value (LHV) at 60EF) **and a maximum generation capacity of 80 megawatts**, utilizing water injection for NO<sub>x</sub> emissions reduction, and exhausting to stack #2. Fuel oils no.1 and no. 2 will be used as alternative fuels. An inlet fogging system may be used to enhance power production.

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (b) One (1) natural gas-fired turbine, identified as Unit #2, with a heat input capacity of 900 million BTU per hour (lower heating value (LHV) at 60EF) **and a maximum generation capacity of 80 megawatts**, utilizing water injection for NO<sub>x</sub> emissions reduction, and exhausting to stack #2. Fuel oils no.1 and no. 2 will be used as alternative fuels. An inlet fogging system may be used to enhance power production.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Annual PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to emission limits established in Installation Permit No. 6078 issued by the Evansville Environmental Protection Agency on May 21, 1980, and a PSD Exemption letter issued by the State of Indiana Air Pollution Control Board on August 29, 1980:

- (a) The Permittee shall use only natural gas or No. 1 or No. 2 distillate oil as fuel for Unit #2.
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #2 shall not exceed ~~0.43~~ **0.21 lb/MMBtu when firing natural gas and 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (c) **Emissions of carbon monoxide (CO) from Unit #2 shall not exceed 0.084 lb/MMBtu and 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (ed) Emissions of sulfur dioxide (SO<sub>2</sub>) from Unit #2 shall not exceed 0.33 lb/MMBtu when firing distillate oil **with a maximum heating value of 140,000 Btu/gal.**
- (d) ~~The input of natural gas to Unit #2 shall not exceed 3,605 million cubic feet (MMCF) per twelve (12) consecutive month period.~~
- (e) The input of distillate oil to Unit #2 shall not exceed 10,608 thousand gallons (kgal) per twelve (12) consecutive month period **with compliance determined at the end of each month.**
- (f) ~~For every gallon of fuel oil that is used, natural gas usage shall be decreased by 252.4 cubic feet.~~

Conditions D.2.1(d) and D.2.1(e) are equivalent to 245 tons/yr of SO<sub>2</sub> emissions. Therefore, the potential to emit NO<sub>x</sub>, CO, and SO<sub>2</sub> from the Unit #2 is each less than 250 tons/yr.



~~These limits are required to limit the potential to emit of nitrogen oxides (NO<sub>x</sub>) from Unit #2 to not more than 240 tons per 12 consecutive month period, and to limit the potential to emit of sulfur dioxide (SO<sub>2</sub>) from Unit #2 to not more than 225 tons per 12 consecutive month period, as required by the 1980 preconstruction approvals. Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to the original installation of Unit #2.~~

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**D.2.2 Inlet Fogging PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]**

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- (a) The Unit 2 inlet fogging system shall only be used from the first of May to the end of September each year (i.e., the restricted period).
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #2 shall not exceed ~~0.13~~ **0.21 lb/MMBtu and 61.3 tons per restricted period with compliance determined at the end of each month** when firing ~~natural gas with~~ the inlet fogging system is in use.
- (c) **Emissions of carbon monoxide (CO) from Unit #2 shall not exceed 0.084 lb/MMBtu and 131 tons per restricted period with compliance determined at the end of each month when the inlet fogging system is in use.**
- (ed) Emissions of sulfur dioxide (SO<sub>2</sub>) from Unit #2 shall not exceed 0.33 lb/MMBtu when firing distillate oil **which has a maximum heating value of 140,000 Btu/gal**, with the inlet fogging system in use.
- (d) ~~The input of natural gas to Unit 2 shall not exceed 914 million cubic feet (MMCF) per restricted period while the inlet fogging system is in use. This usage limit and the NO<sub>x</sub> emission limit in Condition D.2.2(b) limit the total NO<sub>x</sub> emissions with the fogging system in use to not more than 60.85 tons per restricted period.~~
- (e) The input of distillate oil to Unit 2 shall not exceed ~~1,888~~ **1,753** thousand gallons (kgal) per restricted period **with compliance determined at the end of each month** while the inlet fogging system is in use. ~~This usage limit and the SO<sub>2</sub> emission limit in Condition D.2.2(e) limit the total SO<sub>2</sub> emissions with the fogging system in use to not more than 40.05 tons per restricted period.~~
- (f) ~~For every gallon of fuel oil that is used, natural gas usage shall be decreased by 252.4 cubic feet.~~

**Conditions D.2.2(d) and D.2.2(e) are equivalent to 40.5 tons/yr of SO<sub>2</sub> emissions.** These limits are required to limit the **net emission increase from potential to emit of this modification the installation of the fogging system** to not more than ~~39.5~~ **40** tons of nitrogen oxides (NO<sub>x</sub>), and 39.5 tons sulfur dioxide (SO<sub>2</sub>), **and 100 tons of CO** per 5 month restricted period. Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to the installation and use of the Unit 2 inlet fogging system.

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**D.2.9 Continuous Emissions Monitoring [326 IAC 3-5]**

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In order to comply with Conditions D.2.1(a), D.2.1(b), D.2.2(a), and D.2.2(b), and pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), a continuous monitoring system shall be calibrated, maintained, and operated for measuring NO<sub>x</sub> and CO, which meets the performance specifications of 326 IAC 3-5-2.

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**D.2.10 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]**

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The Permittee shall meet the monitoring requirements of 326 IAC 10-4-12(b)(1) through (b)(3) that are applicable to their monitoring system for turbine Unit #2 on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.

**D.2.911 Visible Emissions Notations**

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**D.2.4012 Sulfur Content and Nitrogen Content [326 IAC 12] [40 CFR 60, Subpart GG]**

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**Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.2.4113 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (36) below. Records shall be taken monthly and shall be sufficient to document compliance with Conditions D.2.1 and D.2.2.
- (1) Calendar dates covered in the compliance determination period;
  - (2) The dates and time of operation of the inlet fogging system; ~~and~~
  - (3) **All continuous emissions monitoring data, pursuant to 326 IAC 3-5;**
  - (4) **The total NO<sub>x</sub> and CO emissions for each month;**
  - (5) **The weight of NO<sub>x</sub> and CO emitted for each compliance period; and**
  - (36) Actual natural gas and fuel oil usage since the last compliance determination period. Fuel usage records shall differentiate the quantity of fuel used with the inlet fogging system in operation.
- (c) To document compliance with Condition D.2.911, the Permittee shall maintain records of visible emission notations of the Unit #2 stack exhaust when firing distillate oil.
- (d) To document compliance with Condition D.2.4012, the Permittee shall maintain records of the nitrogen and sulfur content of all fuels combusted in Unit #2.

**D.2.4214 Reporting Requirements**

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- (d) To document compliance with Condition D.2.911, the Permittee shall certify, on the form provided, that natural gas was fired in the turbine at all times during the report period. Alternatively, the Permittee shall report the number of days during which an alternate fuel was burned during the report period. The form shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported.

**D.2.15 Nitrogen Oxides Budget Permit Application Submittal Requirement [326 IAC 10-4-4(a)(1)]**

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For NO<sub>x</sub> budget units that commenced operation prior to January 1, 2001, the NO<sub>x</sub> authorized account representative shall submit a complete NO<sub>x</sub> budget permit application in accordance with 326 IAC 10-4-7 at least two hundred seventy (270) days prior to May 31, 2004. This application shall be submitted by the NO<sub>x</sub> authorized account representative to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

**~~INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT~~**  
**~~OFFICE OF AIR QUALITY~~**  
**~~COMPLIANCE DATA SECTION~~**  
**~~and~~**  
**~~CITY OF EVANSVILLE~~**  
**~~ENVIRONMENTAL PROTECTION AGENCY~~**

**Part 70 Quarterly Report: Unit #2 Natural Gas**

Source Name: \_\_\_\_\_ Southern Indiana Gas and Electric Company  
Source Address: \_\_\_\_\_ 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: \_\_\_\_\_ 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: \_\_\_\_\_ T163-6899-00001  
Permit Mod No.: \_\_\_\_\_ 163-14083-00001  
Facility: \_\_\_\_\_ Natural Gas/Fuel Oil Turbine (Unit #2)  
Parameter: \_\_\_\_\_ PSD Limit (SO<sub>2</sub>, NO<sub>x</sub>) (Natural Gas)  
Limit: \_\_\_\_\_ 3605 million cubic feet of natural gas used per 12 consecutive month period

YEAR: \_\_\_\_\_

| Month | Natural Gas Usage<br>This Month<br>(MMCF) | Natural Gas Usage<br>Previous 11 Months<br>(MMCF) | Total Natural Gas Usage<br>for 12 Month Period<br>(MMCF) | Usage<br>Limit<br>(MMCF) |
|-------|---|---|--|--------------------------|
|       |   |   |  | 3605*                    |
|       |   |   |  | 3605*                    |
|       |   |   |  | 3605*                    |

\* For every gallon of fuel oil used, natural gas usage shall be decreased by 252.4 cubic feet.

\_\_\_\_\_ **9** \_\_\_\_\_ No deviation occurred in this quarter:  
\_\_\_\_\_ **9** \_\_\_\_\_ Deviation/s occurred in this quarter:  
\_\_\_\_\_ Deviation has been reported on: \_\_\_\_\_

\_\_\_\_\_ Submitted by: \_\_\_\_\_

\_\_\_\_\_ Title / Position: \_\_\_\_\_

\_\_\_\_\_ Signature: \_\_\_\_\_

\_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_ Phone: \_\_\_\_\_

\_\_\_\_\_ Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Data Section**

**Part 70 Quarterly Report**

**Source Name:** Southern Indiana Gas and Electric Company  
**Source Address:** 2600 Broadway Avenue, Evansville, Indiana 47712  
**Mailing Address:** 20 Northwest Fourth Street, Evansville, Indiana 47741  
**Part 70 Permit No.:** T163-6899-00001  
**Facility:** Turbine Unit #2  
**Parameter:** NOx emissions  
**Limit:** Less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

**YEAR:** \_\_\_\_\_

| Month   | Column 1   | Column 2           | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
|         | This Month | Previous 11 Months | 12 Month Total      |
| Month 1 |            |                    |                     |
| Month 2 |            |                    |                     |
| Month 3 |            |                    |                     |

- 9      **No deviation occurred in this quarter.**
- 9      **Deviation/s occurred in this quarter.**  
Deviation has been reported on: \_\_\_\_\_

**Submitted by:** \_\_\_\_\_  
**Title / Position:** \_\_\_\_\_  
**Signature:** \_\_\_\_\_  
**Date:** \_\_\_\_\_  
**Phone:** \_\_\_\_\_

**Attach a signed certification to complete this report.**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Data Section**

**Part 70 Quarterly Report**

**Source Name:** Southern Indiana Gas and Electric Company  
**Source Address:** 2600 Broadway Avenue, Evansville, Indiana 47712  
**Mailing Address:** 20 Northwest Fourth Street, Evansville, Indiana 47741  
**Part 70 Permit No.:** T163-6899-00001  
**Facility:** Turbine Unit #2  
**Parameter:** CO emissions  
**Limit:** Less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

**YEAR:** \_\_\_\_\_

| Month   | Column 1   | Column 2           | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
|         | This Month | Previous 11 Months | 12 Month Total      |
| Month 1 |            |                    |                     |
| Month 2 |            |                    |                     |
| Month 3 |            |                    |                     |

- 9      **No deviation occurred in this quarter.**
- 9      **Deviation/s occurred in this quarter.**  
Deviation has been reported on: \_\_\_\_\_

**Submitted by:** \_\_\_\_\_  
**Title /Position:** \_\_\_\_\_  
**Signature:** \_\_\_\_\_  
**Date:** \_\_\_\_\_  
**Phone:** \_\_\_\_\_

**Attach a signed certification to complete this report.**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report: Unit #2 Distillate Oil**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
~~Permit Mod No.: 163-14083-00001~~  
Facility: Natural Gas/Fuel Oil Turbine (Unit #2)  
Parameter: ~~PSD Limit (PM, SO<sub>2</sub>, NO<sub>x</sub>)~~ (Distillate Oil Usage)  
Limits: ~~0.3% sulfur content, by weight~~  
~~0.33 lb/MMBtu SO<sub>2</sub>~~  
10,608 thousand gallons of distillate fuel oil used per 12 consecutive month period **with compliance determined at the end of each month**

YEAR: \_\_\_\_\_

| Month | Distillate Oil Usage<br>This Month<br>(kgals) | Distillate Oil Usage<br>Previous 11 Months<br>(kgals) | Total Distillate Oil Usage<br>for 12 Month Period<br>(kgals) | Usage<br>Limit<br>(kgals) |
|-------|---|---|--|---------------------------|
|       |   |   |  | 10,608                    |
|       |   |   |  | 10,608                    |
|       |   |   |  | 10,608                    |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Seasonal Inlet Fogging Report: Natural Gas**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T 163-6899-00001  
~~Permit Mod No.: T 163-14083-00001~~  
Facility: Natural Gas/Fuel Oil Turbine with Inlet Fogging in Use (Unit 2)  
Parameter: ~~PSD Minor Modification Limit (SO<sub>2</sub>, NO<sub>x</sub> Emissions) (Natural Gas)~~  
Limit: ~~914 million cubic feet of natural gas used~~ **Less than 61.3 tons per 5 consecutive month period with compliance determined at the end of each month.**

YEAR: \_\_\_\_\_

| Month                                       | May | June | July | August | September | Season Total | Season Limit                          |
|---|-----|------|------|--------|-----------|--------------|---------------------------------------|
| Natural Gas Usage This Month (MMCF)         |     |      |      |        |           |              | 914*<br>MMCF                          |
| Equivalent NO <sub>x</sub> Emissions (Tons) |     |      |      |        |           |              | 60.85<br>61.0<br>tons NO <sub>x</sub> |

\* For every gallon of fuel oil used, natural gas usage shall be decreased by 252.4 cubic feet.

- 9 No deviation occurred in this quarter.  
9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**Attach a signed certification to complete this report.**

**This form is due within thirty (30) days after September 30.**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Seasonal Inlet Fogging Report: Natural Gas**

**Source Name:** Southern Indiana Gas and Electric Company  
**Source Address:** 2600 Broadway Avenue, Evansville, Indiana 47712  
**Mailing Address:** 20 Northwest Fourth Street, Evansville, Indiana 47741  
**Part 70 Permit No.:** T 163-6899-00001  
**Facility:** Natural Gas/Fuel Oil Turbine with Inlet Fogging in Use (Unit 2)  
**Parameter:** CO Emissions  
**Limit:** Less than 131 tons per 5 consecutive month period with compliance determined at the end of each month.

**YEAR:** \_\_\_\_\_

| Month               | May | June | July | August | September | Season Total | Season Limit  |
|---------------------|-----|------|------|--------|-----------|--------------|---------------|
| CO Emissions (Tons) |     |      |      |        |           |              | 131.0 tons CO |

- 9 No deviation occurred in this quarter.  
9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

**Submitted by:** \_\_\_\_\_

**Title / Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

Attach a signed certification to complete this report.

**This form is due within thirty (30) days after September 30.**



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Seasonal Inlet Fogging Report: Distillate Oil**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Permit Mod No.: ~~163-14083-00001~~  
Facility: Natural Gas/Fuel Oil Turbine with Inlet Fogging in Use (Unit #2)  
Parameter: ~~PSD Minor Modification Limit (SO<sub>2</sub>, NO<sub>x</sub>)~~ (Distillate Oil **Usage**)  
Limits: ~~No. 1 or No. 2 fuel oil with not more than 0.3% sulfur content, by weight~~  
**1888 1,753** kgals of distillate fuel oil used per 5 consecutive month period **with**  
**compliance determined at the end of each month**

YEAR: \_\_\_\_\_

| Month  | May | June | July | August | September | Season<br>Total | Season<br>Limit                            |
|--|-----|------|------|--------|-----------|-----------------|--|
| Distillate Oil<br>Usage This Month<br>(MMCF<br>kgal) |     |      |      |        |           |                 | <del>1888 *</del><br><b>1,753</b><br>kgals |
| Equivalent SO <sub>2</sub><br>Emissions (Tons)       |     |      |      |        |           |                 | <del>40.05</del><br>tons SO <sub>2</sub>   |

\* ~~For every gallon of fuel oil used, natural gas usage shall be decreased by 252.4 cubic feet.~~

9 No deviation occurred in this period.

9 Deviation/s occurred in this period.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**Attach a signed certification to complete this report.**

**This report is due within thirty (30) days after September 30.**

## **Conclusion**

This modification shall be subject to the conditions of the attached Part 70 Significant Permit Modification No. 163-16220-00001.